

Line type – Straight

Draws straight line segments.

Line type – Smooth

Draws curves instead of straight line segments. Click **Properties** to set details for the curves.

- **Cubic spline** interpolates the data points with polynomials of degree 3. The transitions between the polynomial pieces are smooth, having the same slope and curvature.
- **Resolution** determines how many line segments are calculated to draw a piece of polynomial between two data points. A value in the range 1 to 100. Click any data point to see the intermediate points.
- **B-spline** uses parametric, interpolating B-spline curves. The curves are built from polynomials. **Degree of polynomials** sets the degree of these polynomials. A value in the range 1 to 15.

Line type – Stepped

Uses only horizontal and vertical lines. Click **Properties** to set details for the stepped lines.

After a scatter chart is created, its default settings can be changed in ways such as the following. Be sure to first double-click the chart to enter edit mode. Depending on the option, a data point or data series may also need to be double-clicked.

- Line styles and icons – double-click or right-click on a data series in the chart to open the Data Series dialog. See “Lines, areas, and data point icons” on page 124 for further information.
- Error bars – For 2D charts, select **Insert > Y Error Bars** or **X Error Bars** to enable the display of error bars. See “Error bars” on page 150 for further information.
- **Mean Value Lines** and **Trend Lines** – Enable the display of mean value lines and trend lines with commands on the **Insert** menu. See “Trend and mean value lines” on page 144 for further information.

Examples of XY or scatter charts

By default, the first column or row of data (depending on whether the data is arranged in columns or rows) is represented on the X axis. The rest of the rows of data are then compared against the first row of data.

Scatter charts may surprise those unfamiliar with how they work. This can be seen in examples using the following data (Figure 142), which is organized with data series in rows.